ABSTRACT

A polyaxial locking cervical screw and plate assembly for immobilization of cervical bones, via fixation to surfaces thereof, including a plate, having a pair of elongated tapered holes in the top and bottom thereof, into which holes elongated coupling elements and screws may be inserted. Each coupling element has an equivalent taper which matches the taper of the holes in the plate, and an interior semi-spherical curvate surface in which the curvate head of the screw may be polyaxially mounted. The coupling elements are initially disposed in the holes in the plate such that they may slide axially therein. The bone screws are inserted through the respective coupling elements until the heads thereof enter the curvate volumes thereof. Once the head is fully seated in the coupling element, advancement of the screw causes the coupling element to crush lock to the plate and to the head of the screw.